This listing of claims will replace all prior versions, and listings, of claims in the

application:

**Listing of Claims:** 

1-3 (Cancelled).

4 (Currently Amended). A method for detecting the presence of a target single-

stranded nucleic acid in a samplehybrid nucleic acid by use of a cationic dye compound,

comprising:

providing a cationic dye compound comprising a cation group and a chromophore

 ${\color{red}\textbf{coupled to said cation group, said chromophore having a heteropolycyclic structure containing a} \\$ 

nitrogen atom;

bringing a nucleic acid probe and contacting a sample suspected of containing a

target single-stranded nucleic acid into contact with each other a nucleic acid probe that is a

DNA fragment or a chemically synthesized DNA comprising a nucleic acid sequence

complementary to the target single-stranded nucleic acid, under hybridization conditions, to

formwhereby a double-stranded hybrid nucleic acid composed of said nucleic acid probe and

said target nucleic acid will be formed if the target nucleic acid is present in the sample, wherein

said nucleic acid probe is a DNA fragment or chemically synthesized DNA comprising a nucleic

acid sequence complementary to the target nucleic acid;

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binding said-a cationic dye compound onto said-any hybrid nucleic acid formed in said contacting step by adding the cationic dye compound before, during or after said hybridization contacting step, wherein said cationic dye compound has the following formula (1):

 $X-(Y-Z)_n$  (I)

wherein n denotes 1 to 12, X represents a chromophore having at least four pyrrole rings, Y represents a connecting group or a direct bond between X and Z, and Z represents a cationic functional group, or a functional group whose property is convertible to a cationic property; and

measuring circular dichroism of said any cationic dye compound bound onto said a hybrid nucleic acid; wherein the presence of said circular dichroism indicates that the sample contained target single-stranded nucleic acid.

wherein said cationic dye compound is represented by the following formula (I): X-(Y-Z)<sub>x</sub>-(I)

wherein n denotes 1 to 12, X represents a chromophore having at least four pyrrole rings, Y represents a connecting group or a direct bond between X and Z, and Z represents a cationic functional group, or a functional group whose property is convertible to a cationic property

5 (Cancelled).

6 (Previously Presented). The method according to claim 4, wherein said chromophore is selected from the group consisting of porphyrin, porphyrin derivatives, phthalocyanine, and phthalocyanine derivatives. 7 (Currently Amended). The method according to claim 4, further <u>including</u>, <u>prior to said contacting step</u>, the <u>step of comprising</u>:immobilizing an analyte having said target <u>single-stranded</u> nucleic acid or said nucleic acid probe onto a solid phase carrier to bring said

analyte and said nucleic acid probe into contact with each other under hybridization conditions.

8 (Canceled).